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QL85H6S-A/B/C

◆OVERVIEW

QL85H6SA is a MOCVD grown 850nm band *AlGaAs* laser diode with quantum well structure. It's an attractive light source, with a typical light output power of 20mW for industrial optical module and sensor applications.

◆APPLICATION

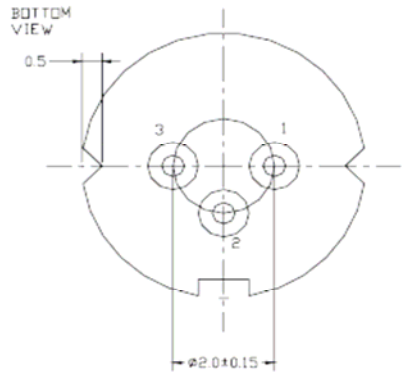
- Sensor
- Industrial Optical Module

◆FEATURES

- Visible Light Output : λp = 850 nm
- Optical Power Output : 20mW CW
- Package Type : TO-18 (5.6mmϕ)
- Built-in Photo Diode for Monitoring Laser Diode

◆ELECTRICAL CONNECTION

Bottom View



Pin Configuration

A	LD cathode, PD anode (Fig. 1)
B	LD , PD anode (Fig. 2)
C	LD anode, PD cathode (Fig. 3)

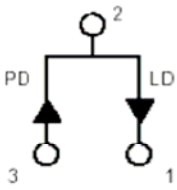


Fig. 1
QL85H6SA

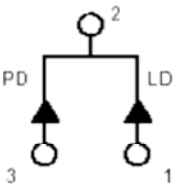


Fig. 2
QL85H6SB

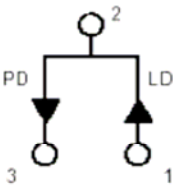


Fig. 3
QL85H6SC

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◆ABSOLUTE MAXIMUM RATING at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	P	22	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	Topr	–10 ~ +60	°C
Storage Temperature	Tstg	–40 ~ +85	°C

◆ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25°C

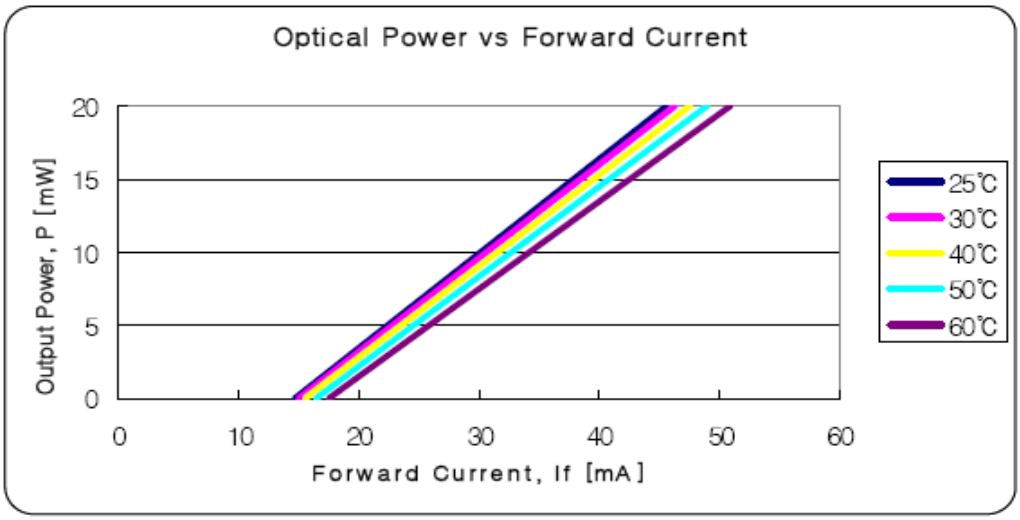
Items	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	20	-	mW	-
Threshold Current	Ith	5	20	35	mA	-
Operating Current	Iop	40	55	70	mA	Po=20mW
Slope Efficiency	SE	0.4	0.5	0.9	mW/mA	10~20 mW
Operating Voltage	Vop	-	2.0	2.5	V	Po=20mW
Lasing Wavelength	λp	845	855	865	nm	Po=20mW
Beam Divergence	θ∥	7	9	12	deg	Po=20mW
	θ ⊥	25	32	40	deg	Po=20mW
Beam Angle	Δθ∥	-	-	±2	deg	Po=20mW
	Δθ ⊥	-	-	±3	deg	Po=20mW
Monitor Current	Im	0.1	0.6	1.0	mA	Po=20mW
Astigmatism	As	-	-	15	μm	
Optical Distance	ΔX, ΔY, ΔZ	-	-	±60	μm	

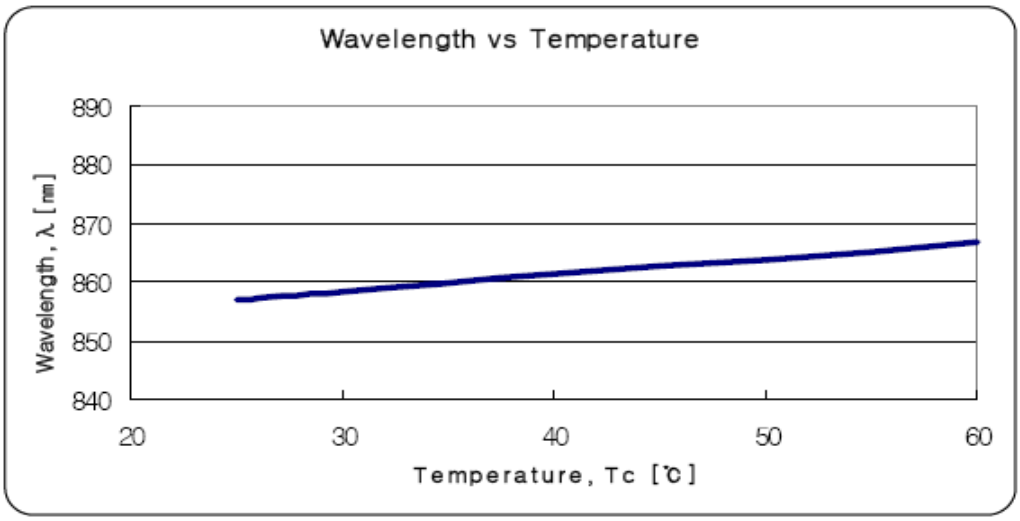
NOTICE : QL85H6S-A/B/C to be operated on APC

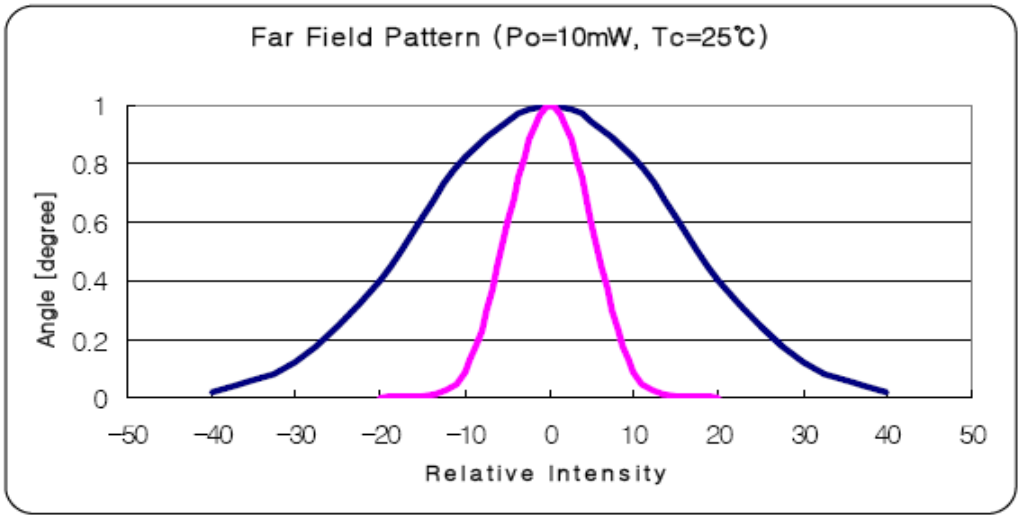
The above product specifications are subject to change without notice.

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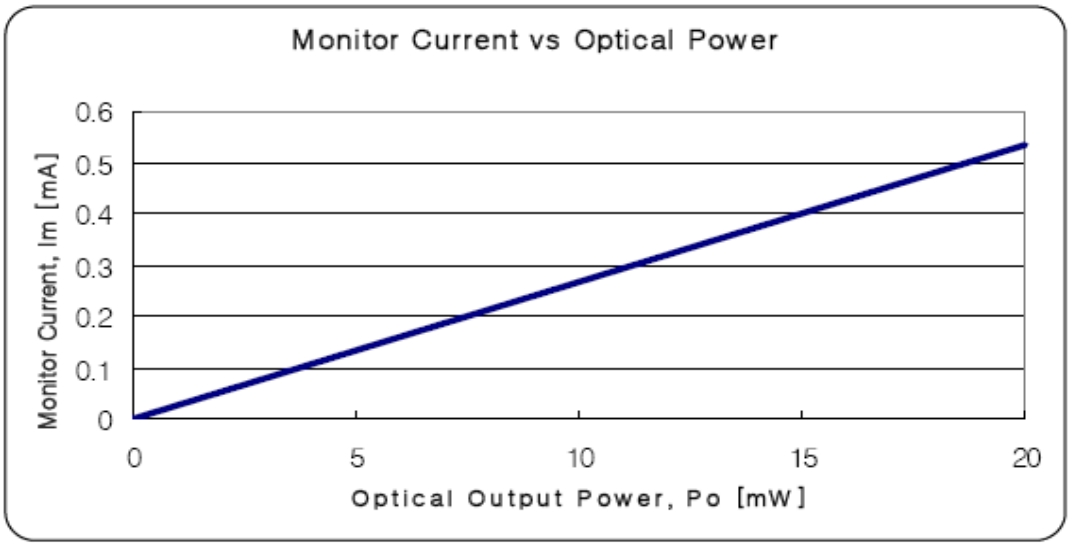
EXAMPLE of REPRESENTITIVE CHARACTERISTICS

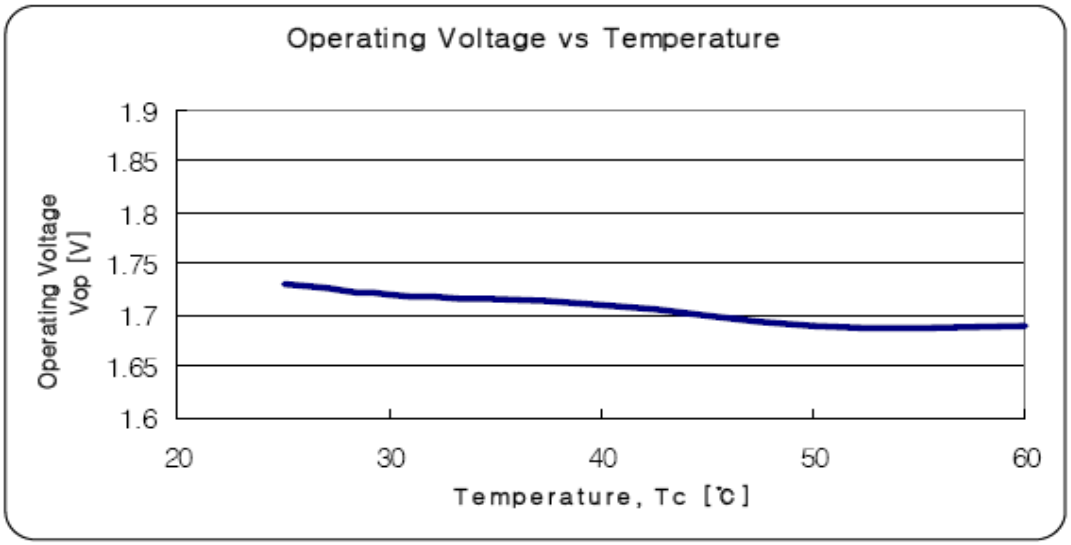


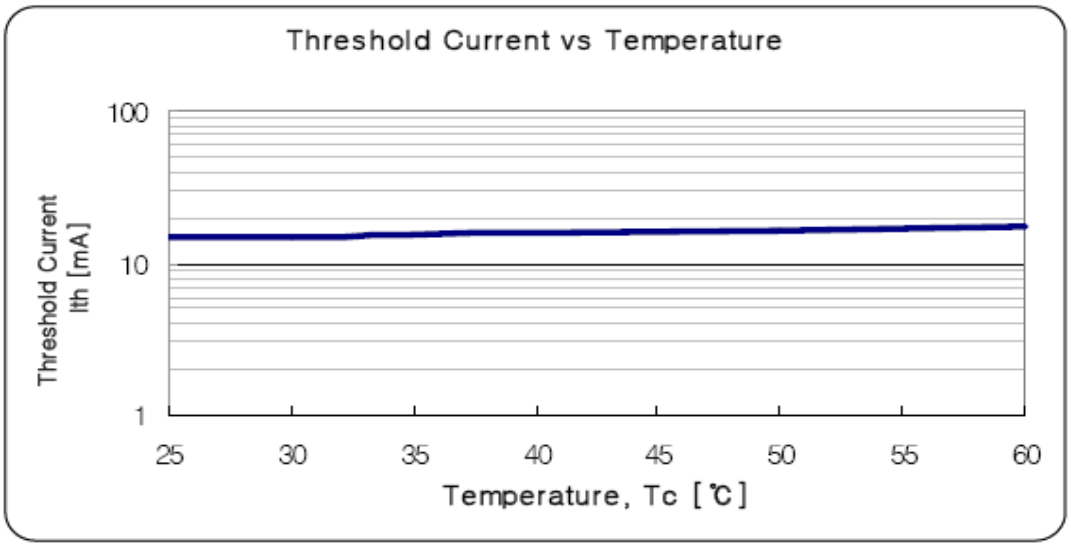




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◆PACKAGE DIMENSION

